



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/755,254	01/04/2001	William Joshua Price	M-8504 US	5201
32566	7590	05/16/2006	EXAMINER	
CHANG, ERIC				
ART UNIT			PAPER NUMBER	
			2116	

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/755,254	PRICE, WILLIAM JOSHUA	
	<b>Examiner</b>	<b>Art Unit</b>	
	Eric Chang	2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 03 January 2006.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 3-5 and 7-28 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) 3-5,7 and 8 is/are allowed.

6) Claim(s) 9-28 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) 9-28 are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>3-14-01</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

**DETAILED ACTION**

1. Claims 3-5 and 7-28 are pending.

***Election/Restrictions***

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 3-5, 7-8 and 19-27, drawn to Invention I, classified in class 713, subclass 340.
  - II. Claims 9-18 and 28, drawn to Invention II, classified in class 713, subclass 340.
3. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as allowing a first enclosure controller to monitor and decouple a bus powered by a second voltage circuit, while invention II has separate utility such as allowing a first enclosure controller to monitor and decouple its own bus from a mutually shared bus. See MPEP § 806.05(d).
4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

5. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

***Claim Objections***

6. Claim 27 is objected to because of the following informalities: it is dependent on cancelled claim 1. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 14 recites the limitations “the second switch operable to decouple the second and the third buses when the voltage output from the first voltage circuit falls below the predetermined threshold”. However, applicant discloses in the specification that the second switch decouples the second and third buses when the voltage output from the second voltage circuit falls below the predetermined threshold [page 25, lines 6-16].

***Claim Rejections - 35 USC § 103***

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 9-26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent U.S. Patent 6,260,079 to White, in view of U.S. Patent 6,046,511 to Kincaid.

11. As to claim 14, White discloses a device comprising a controller powered by a voltage circuit and coupled to an internal bus [FIG. 10, and col. 15, lines 38-56]. White teaches that a plurality of such devices may further be coupled to an external SCSI bus [FIG. 5, elements 513-515 and 518]. Therefore, White teaches a first device comprising a first controller powered by a first voltage circuit and coupled to a first bus, and a second device comprising a second controller powered by a second voltage circuit and coupled to a second bus, substantially as claimed, and that the two devices are further coupled to an external bus.

White teaches all of the limitations of the claim but does not teach that a first switch is coupled between the buses to decouple the first and second buses when a voltage falls below a predetermined threshold.

Kincaid teaches a switch operative to decouple a first and a second bus when a voltage falls below a predetermined threshold [col. 3, lines 25-34]. When the voltage output from the second voltage circuit falls below a predetermined threshold, element [24] decouples the buses, substantially as claimed.

At the time that the invention was made, it would have been obvious to a person of ordinary skill in the art to employ the bus decoupling means as taught by Kincaid. Kincaid teaches that one of ordinary skill in the art would have been motivated to do so that the loss of power, either intentional or accidental, to a portion of the bus would not affect the electrical load on the rest of the bus [col. 3, lines 18-24].

It would have been obvious to one of ordinary skill in the art to combine the teachings of the cited references because they are both directed to the problem of providing resilient and fault-tolerant performance for devices on a bus. Moreover, the bus decoupling means taught by Kincaid would improve the robustness of White because it would also regulate the bus voltage in the event of short circuits and other physical circuit failures [col. 2, lines 8-34].

Furthermore, White discloses devices comprising a controller powered by a first voltage circuit and coupled to an internal bus. Kincaid discloses a switch operable to decouple portions of buses each other when the voltage output from a power circuit falls below a predetermined threshold. Because White and Kincaid teach that buses coupled to a controller may be decoupled when the voltage output from a power circuit falls below a predetermined threshold, it would be obvious to one of ordinary skill in the art that White and Kincaid further teach that any number of buses coupled to a controller may likewise be decoupled by such switch means. Therefore, White and Kincaid teach switches for decoupling a bus coupled to a mutual bus coupled to the controllers, substantially as claimed.

12. As to claims 10-13, 15-18, 20-22 and 24-26, White discloses a bus coupled to a first plurality of elements, including at least one of a temperature sensor, a memory, a backplane

controller, a port bypass circuit, an I/O expansion slots for disk drives, and at least one power supply [col. 20, lines 64-67, and col. 21, lines 1-26]. It would further be well known to one of ordinary skill in the art that a battery can be used as a power supply, substantially as claimed.

13. As to claims 9, 19 and 23, White discloses devices comprising a controller powered by a first voltage circuit and coupled to an internal bus. Kincaid discloses a switch operable to decouple portions of buses each other when the voltage output from a power circuit falls below a predetermined threshold. Because White and Kincaid teach that buses coupled to a controller may be decoupled when the voltage output from a power circuit falls below a predetermined threshold, it would be obvious to one of ordinary skill in the art that White and Kincaid further teach that any number of buses coupled to a controller may likewise be decoupled by such switch means. Therefore, White and Kincaid teach a second, third and fourth switch for decoupling a third, fourth, fifth, sixth and seventh bus coupled to controllers, substantially as claimed.

14. As to claim 28, Kincaid discloses a communication bus system for receiving and distributing information from a plurality of subsystems connected to the bus [col. 1, lines 54-59]. Therefore, it would have been obvious to one of ordinary skill in the art to apply the teachings of Kincaid to any applicable bus system, such as an I2C bus.

*Allowable Subject Matter*

15. Claims 5-8 are allowed.

16. Claim 27 would be allowable if rewritten to overcome the claim objection, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

17. Applicant's arguments, see pages 6-7, filed January 3, 2006, with respect to claims 5-13 and 27 have been fully considered and are persuasive. The rejection of claims 5-13 has been withdrawn.

18. Applicant's arguments filed January 3, 2006, with respect to claims 14-26 and 28 have been fully considered but they are not persuasive.

19. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that an enclosure processor can monitor and access shared elements when the other enclosure processor is down) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.

20. Claim 14 recites the limitation of a switch decoupling a first bus with a controller from a second bus when the voltage output from a power circuit associated with the first bus falls below a predetermined threshold. White discloses devices comprising a controller powered by a first voltage circuit and coupled to an internal bus. Kincaid discloses a switch operable to decouple

portions of buses each other when the voltage output from a power circuit falls below a predetermined threshold. Because White and Kincaid teach that buses coupled to a controller may be decoupled when the voltage output from a power circuit falls below a predetermined threshold, it would be obvious to one of ordinary skill in the art that White and Kincaid further teach that any number of buses coupled to a controller may likewise be decoupled by such switch means. Therefore, White and Kincaid teach switches for decoupling a bus coupled to a mutual bus coupled to the controllers, substantially as claimed.

*Conclusion*

21. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

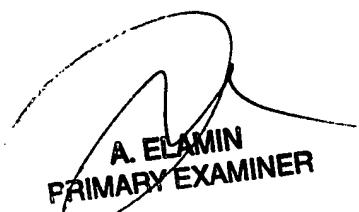
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Chang whose telephone number is (571) 272-3671. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (571) 272-3670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 15, 2006  
ec



A. ELAMIN  
PRIMARY EXAMINER